<110> Fiscella et al.

<120> 19 Human secreted proteins

<130> PZ045P1

<140> Unassigned
<141> 2001-04-11

<150> PCT/US00/28664
<151> 2000-10-17

<150> 60/163,085
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<170> PatentIn Ver. 2.0

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actggttcat cttatttatt tgtctccttc atatttacat aattaaatct gttcctcact     1080
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<210> 16
<211> 682
<212> DNA
<213> Homo sapiens

<400> 16
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caactgttgt tttggcaaga cggtcctgat gtacaagctt gattgaaatt cactgctcac      540
ttgatacgtt attcagaaac ccaaggaatg gctgtcccca tcctcatgtg gctgtgtgga      600
gctcagctgt gttgtgtggc agtttattaa actgtccccc agataaaaaa aaaaaaaaaa      660
aaactcgagg gggggcccgg ta                                              682


<210> 17
<211> 1738
<212> DNA
<213> Homo sapiens

<400> 17
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<210> 18
<211> 2053
<212> DNA
<213> Homo sapiens

<400> 18
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gatggtgggc agtggtggtg ctggctgcgt tcccctccct aggggcaggt ggggagactc       180
ccgaagcccc tccggagtca tggacccagc tatggttctt ccgatttgtg gtgaatgctg       240
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<210> 19
<211> 985
<212> DNA
<213> Homo sapiens

<400> 19
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gcggaaaagg acaaggatcc aaactggcga atttgctgat cttcgcgtcc ctctccgctt     180
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tactcttctt gatcatgttg gtgttgaaac tggatgagaa agcaccttgg aactggttcc     360
tcatattyat tccagtctgg atatttgata ctatccttct tgtcctgctg attgtgaaaa     420
tggctgggcg gtgtaagtct ggctttgacc ctcgacatgg atcacacaat attaaaaaaa     480
aagcctggta cctcattgca atgttactta aattagcctt ctgcctcgca ctctgtgcta     540
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caagcttcaa gaataccaga gaactgaggg aaaataccaa atgtagtttt atactacttc     780
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accgggggg gggcccccccc cccaa                                            985


<210> 20
<211> 848
<212> DNA
<213> Homo sapiens

<400> 20
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gcactgcttg gtgctggccc gggccagtgc agacagtgcg tccttgccca cgatctcgca     180
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tgcagacaca tcactgggc agacctcac ctcctcctgt tccttgagtt ccatcttggt       600
tggggcacc ctcagaccta gatgttcctg cccacctttt acccagagaa gcgcttttca      660
cctaaggact ccgcacaatc agtaccacca tgggagcacc tccctggcca gccactgagg     720
gcgcactggg cctccctcca tcataccaac accccgtcc cccactggct ctcagattac      780
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aaaaaaaa                                                               848


<210> 21
<211> 1097
<212> DNA
<213> Homo sapiens

<400> 21
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atcccaaagg aaatgaaatc agcacttcat agagatatct gcattctcat gctcactgca      240
gcattattca caatagccaa gacagagaaa caacataagt gcccatcaat agatgaacag      300
ataaataatt tgcagtatat atgtacaatg gaatatcatt cagccttaca aaaggagatg      360
ctgctatatt tgcaataaca tgggtgaacc tggaggacgt tacgctaagt aaaataacaa      420
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aaaaaaaaaa aaaaaaa                                                    1097
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<210> 22
<211> 665
<212> DNA
<213> Homo sapiens

<400> 22

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gccagcccgt tcccagatca acctgccagt ggaaggccgc agtgcactcc tggagccaag      360
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cctcccttct cccagctcag gtggccctga gggctccctc ggaacagtgc ctcaaatcct      480
gacccaaggg ccagcatggg gaagagatgg ttgcaggcaa aatgcacttt atagagattt      540
tctattgctg ggaaggtgtg tttctcccac aatttgtttg tgaatattca cttgtttat      600
aaatgtctga cctgtcttga aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa      660
aaaaa                                                                  665
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<210> 23
<211> 700
<212> DNA
<213> Homo sapiens

<400> 23

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gctggtggca gcgatcgtgt ttatcagttt tggcgtggtg gccgccttct gctgcgccat      300
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gccagtttac tccagtgggg tggggtactt gtacgatgtc taccagacag aagtgagcag      420
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gtgaaccgtt gatgccccct gtgtttggga ccttgacatt tcgatgtgct gtatttttact      600
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<210> 24
<211> 1828
<212> DNA
<213> Homo sapiens

<400> 24
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tcagatgtat ggtctgctg cagcaaagtg tttgcctgct ttatttagct aatacttttt        180
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tttgagagct aatcacttca tttattatgt aaatctctct attgctattt ttctcttttg     1740
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aaaggaaact aaaaaaaaaa aaaaaaaa                                          1828


<210> 25
<211> 692
<212> DNA
<213> Homo sapiens

<400> 25
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ttccattgtc tagagggagc catttccact tgcagaagcg agcccttgca gaggcatctt        180
ttgaagcaac tctgtgtgag ttgtttgtca tagaaactgc tagcaaggga actctgctaa       240
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cctcactgct tccttctccc tttcccatct tgacttctgg aatagccctt gccaaaatcc       540
agggatcata ctgcataaac tagattttca gtgtctgcat gttttctaga taacatctcc       600
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cgctaactgg tatctacaaa aaaaaaaaaa aa                                          692


<210> 26
<211> 700
<212> DNA
<213> Homo sapiens

<400> 26
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cattttttcat ggtgatgatt ttatttgtag ctttcataac ctgttgggaa gaagttacta   180
ctttggtaca ggctatcagg ataacttcct atatgaatga aactatctta tattttcctt   240
tttcatcccca ctccagttat actgtgagat ctaaaaaaat attcttatcc aagctcattg   300
tctgtttttct cagtacctgg ttaccatttg tactacttca ggtaatcatt gtttttactta   360
aagttcagat tccagcatat attgagatga atattccctg gttatacttt gtcaatagtt   420
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ttgagcaaat tgaaaagcct atatccaataa tgatttgtta atattattaa ttaaaagtta   600
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<210> 27
<211> 2752
<212> DNA
<213> Homo sapiens

<400> 27
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acagtcagca ggccactagt ttattaactt ccagtcacct tgattttgc taaaatgaag   180
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acccagcagg actcacgcat tatctatgat tatggaacag ataatttga agaatccata   300
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gtgataatac ccaatgagaa aagtcttcaa ttacaaaaag atgaggcaat aacaccatta   420
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ggaatcaaag caaatgcatt caaaaaactg aataacctca ccttcctcta cttggaccat   840
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cgaaacaaag taatatgaaa atatttaaac agcattacaa aatcctagtt tatactagac  1320
taccatttaa aaatcatgtt tttatataaa tgcccaaatt tgagatgcat tattcctatt  1380
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agcagatagt ctcatattta ggaaaacttt ccaaataaaa taaatgttat tctctgataa  1680
agagctaata cagaaatgtt caagttattt tactttctgg taatgtcttc agtaaaatat  1740
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tatggcaaag tctttcaaat acgagataac tgcaaaatat tttcctttta tactacagaa    1920
atgagaatct catcaataaa ttagttcaag cataagatga aaacagaata ttctgtggtg    1980
ccagtgcaca ctaccttccc acccatacac atccatgttc actgtaacaa actgaatatt    2040
cacaataaag cttctgagta acactttctg attactcatg ataaactgac atggctaact    2100
gcaagaatta aatcttctat ctgagagtaa taatttatga tgactcagtg gtgccagagt    2160
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gtaaaagtac aaacattatt tccaccataa agtatgtatt gaaatcaagt tgtctctgtg    2340
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attaaagcat ctgagatcta agaacacaat tattattcta acaatgatta ttagctcatt    2520
cacttatttt gataactaat gatcacagct attatactac tttctcgtta ttttgtgtgc    2580
atgcctcatt tccctgactt aaacctcact gagagcgcaa aatgcagctt tatacttttt    2640
actttcaatt gcctagcaca atagtgagta catttgaatt gaatatataa taaatattgc    2700
aaaataaaat ccatctaaat agaaaaaaaa aaaaaaaaaa aaaaaaactc ga            2752
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<210> 28
<211> 947
<212> DNA
<213> Homo sapiens

<400> 28
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ggcacgagac tgttactccc ttgaatttat aaacaaggag gctcaaagag ctgaagatta      60
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gcccaagtct gactctaaaa ttctgctttc ttcatttagt ttttctgcca ttcaaagttt     180
actgccagct cctccaggaa cttctgagta agcctgtctc caaattgccc ctaactcctc     240
agtgccagtc atgggccagg cccctgtgggg acttggaatg agtaaaacat gcacctattg     300
ttaaggttca cctggtccag aaggggaggc agacccacct gcccaccatg acccggacag     360
aggcgataaa tacggagcac ctcatggcca gggcctggag gattcccacc ataccctacc     420
cagcgccaat aacagaggga ccctggagtt gtgtacacaa gatagcagtt cagtgccttgc     480
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ccaggctcct tctgccatga tacagtttgg atgtttgtcc cttctaatc  ttatatggaa     600
atttgatccc cagtgttgaa ggtggggcct ggtgggagat gttcctgtta tcgggatgga     660
tccttcatga atagcctggt gccatctttg tggtaacaag tgagttctca cttgattagt     720
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ctcttgctat gtgatgctgc tgcccttgtgc cttccgtcat gagtggaagc tccctgaagc     840
ccccaccaga agcaaatgct ggcaccatgc tgcttgtaca gctgcagaa  ctgtgagcca     900
aataaacctc ttttctttat aaattaaaaa aaaaaaaaaa aaaaaaa                   947
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<210> 29
<211> 932
<212> DNA
<213> Homo sapiens

<400> 29
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acgcgtccgg cagcacctgc atttggattt ggcagcagtc aagcagcaac atttatgtcg      60
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aactctggat ttgctgctgc ctcttctgga agccctgctg gttttggcag ttcccccagca     180
tttggagctg cagcctctac cagttcaggt atctctactt ctgctccagc tttttggattt     240
gggaagcctg aagtcacatc ggctgcatca ttttcattca aaagccctgc agcttccagt     300
tttggatcac ctggattttc aggacttcca gcttccttgg caacaggtcc tgtcagagct     360
cccagtggcc ccagcctttg gaggtggcag ttctgtggct ggtttggta  gtccggggct     420
cacattctca cactggcttt ttctaagcca tccagtggac actttttggaa atagccaggc     480
atatcccact tctctgtcag cccttccaagc cagcatcaat tgcaacagat aatgtgttat     540
```

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tcacacccag aaataaacta acagtagaag aactggaaca atttcaatcc aagaaattta        600
ctctgggaaa aattccatta aagcctccac ctctggaact tctaaatgtt taaaagggca        660
attttaaata caaaaaagaa tgatgtttaa aattgctttg agtgattcat acagagatgt        720
atatatgcat acatgtatat attcataagg aatataagct tccatcaata gtgatttaa         780
atttgatttt tttcttaact ctaaatattt aagtaaaaag taacaaaaac tctgcaagca       840
agggaatttt tttgtactgt aattttgaat ggaactgaaa aattatgcac gaataaagta        900
cttttctcat gccaaaaaaa aaaaaaaaaa aa                                      932
```


```
<210> 30
<211> 1670
<212> DNA
<213> Homo sapiens

<400> 30
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  aatggacagg ttctgggaga ccagatggtc tcagacactg agctccagga aatgtccacc       180
  gaggggagta agtacattaa tcgggaaatt aaaaatgctc tcaaggggg gaagcagata        240
  aagacactaa tagaacaaac aaacgaggag cgcaaatccc tgctcaccaa cttggaagaa       300
  gccaagaaga agaaagagga tgccctgaat gacaccaagg attcagaaat gaagctgaag       360
  gcgtcgcagg gggtgtgcaa tgacaccatg atggccctct gggaggagtg taagccctgc        420
  ctgaaacaga cctggggaa gggtctacgc ccgagtctgc agaagcagca cagggctggt         480
  tggccaccag gttgaggagt tcctgaacca gagttctccc ttctacttct ggattaatgg        540
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  gcaggacagt ttcgaccggg catccagcat catggatgag ctgttccagg acagattctt        660
  cacccgtgag gcccaggacc ctttccactt ctcacccttc agctcattcc agcggaggcc       720
  ttttttcttc aatatcaagc accgctttgc ccggaacata atgccttcc ctggctacca        780
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  caaccaggac ggcgccgtgt gcaaggagat ccgtcacaac tccacagggt gcctgaagat        960
  gaaggaccag tgtgaaaagt gccgggagat cttgtctgtg gactgttcgt ccaacaaccc       1020
  cgctcaggtc cagctgcgac aggaacttaa taattccctc cagattgcag agaagttcac       1080
  caagcttgta cgacgagctg ctgcagtcct accaggagaa gatgttcaac acgtcctccc       1140
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  ctgaggaccc gttctatctc caggtcacga cggtgagttc ccagacttct gactccagtg       1260
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  tcctcccaga agacctctcc aggaacaatc ctaaatttat ggagaccgtg gcagagaaag       1380
  cccttcagga ataccgccaa aagagccggg aggagtgaga tgggaacact gcctctccac       1440
  atggcaggtg tctgagttct gtcgcccccg cgatgagcga taggcccctca gagagagctc      1500
  tgcatgtcac cgagtgaccg ggccttcctt gaggccctcc tgtccccctca ccccgcctgt     1560
  cctccctctg gactctgcat tgtaacaccg tgttcactga tcatgggaag aactcctgtg       1620
  tgccactaac tcaataaaac caccagtaat ctgaaaaaaa aaaaaaaaaa                   1670
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<210> 31
<211> 2072
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2065)
<223> n equals a,t,g, or c

<400> 31
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  ggagcgcagg gggcgcgcgg cccgggggact cgcattcccc ggttcccccct ccacccacg      120
```

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cggcctggac catggacgcc agatggtggg cagtggtggt gctggctgcg ttcccctccc        180
tagggggcagg tggggagact cccgaagccc ctccggagtc atggacccag ctatggttct        240
tccgatttgt ggtgaatgct gctggctatg ccagctttat ggtacctggc tacctcctgg        300
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tgaaagcttg tgtgtttggc aatgagccca aggcctctga tgaggtccc ctggcgcccc        420
gaacagaggc ggcagagacc accccgatgt ggcaggccct gaagctgctc ttctgtgcca        480
cagggctcca ggtgtcttat ctgacttggg gtgtgctgca ggaaagagtg atgacccgca        540
gctatggggc cacagccaca tcaccgggtg agcgctttac ggactcgcag ttcctggtgc        600
taatgaaccg agtgctggca ctgattgtgg ctggcctctc ctgtgttctc tgcaagcagc        660
cccggcatgg ggcacccatg taccggtact cctttgccag cctgtccaat gtgcttagca        720
gctggtgcca atacgaagct cttaagttcg tcagcttccc cacccaggtg ctggccaagg        780
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gaagatggtg ctgtgctgag gaaagggat gcagagccct gcccagcacc accacctcct       1920
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aaaaaaamtc ggggggggc ccggnccca at                                       2072
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<210> 32
<211> 985
<212> DNA
<213> Homo sapiens

<400> 32

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gcggaaaagg acaaggatcc aaactggcga atttgctgat cttcgcgtcc ctctccgctt        180
tccggccggc agcgctgcca gggtatattt cctttttccc gatcctgcaa cagcctcttt        240
aaactgttta aatgagaatg tccttggctc agagagtact actcacctgg cttttcacac        300
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aactggaaca gtttactacc atgaatctat cctatgtctt cattcctttta tgggccttgc        600
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caagcttcaa gaataccaga gaactgaggg aaaataccaa atgtagtttt atactactc        780
cataaaacar gattggtgaa tcacggactt ctagtcaacc tacagcttaa ttattcagca        840
tttgagttat tgagatcctt attatctcta tgtaaataaa gtttgttttg gacctcaaaa        900
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa        960
accggggggg gggcccccccc cccaa                                             985
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<210> 33
<211> 1380
<212> DNA
<213> Homo sapiens

<400> 33
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 gccggtgccg ctttggagat cggtgctgga acgaacatcc cggtgctagg ggtgcaggag       120
 gaggacggca gcaaccgcag cagcagcctt caggtaataa tagacgtgga tggaatacaa       180
 ctagccagag atattccaat gtcatccagc catccagttt ctccaaatcc acaccatggg       240
 ggggcagcag agatcaagaa acctaatatt tcaggtttta cagacatttc accagaggaa       300
 ttgaggcttg aataccataa cttcttaacc agcaataact tacagagtta tctaaattct       360
 gtccaacgtt taataaatca atggaggaac agggtaaatg aactgaaaag tctaaatata       420
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 tcttctggaa gccctgctgg ttttggggagt tccccagcat ttggagctgc agcctctacc       660
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 aagccatcca gtgacacttt tggaaatagc agcatatcca cttctctgtc agcctcaagc       960
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 tataagcttc catcaatagt gatttaaat ttgattttt tcttaactct aaatatttaa      1260
 gtaaaaagta acaaaaactc tgcaagcaag ggaattttt tgtactgtaa ttttgaatgg      1320
 aactgaaaaa ttatgcacga ataaagtact tttctcatgc caaaaaaaaa aaaaaaaaa      1380


<210> 34
<211> 363
<212> PRT
<213> Homo sapiens

<400> 34
Met Lys Thr Leu Leu Leu Leu Val Gly Leu Leu Leu Thr Trp Glu Asn
  1               5                  10                  15

Gly Arg Val Leu Gly Asp Gln Met Val Ser Asp Thr Glu Leu Gln Glu
             20                  25                  30

Met Ser Thr Glu Gly Ser Lys Tyr Ile Asn Arg Glu Ile Lys Asn Ala
         35                  40                  45

Leu Lys Gly Val Lys Gln Ile Glu Lys Thr Leu Ile Glu Gln Thr Asn Glu
     50                  55                  60

Glu Arg Lys Ser Leu Leu Thr Asn Leu Glu Glu Ala Lys Lys Lys Lys
 65                  70                  75                  80

Glu Asp Ala Leu Asn Asp Thr Lys Asp Ser Glu Met Lys Leu Lys Ala
                 85                  90                  95

Ser Gln Gly Val Cys Asn Asp Thr Met Met Ala Leu Trp Glu Glu Cys
```

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                100                    105                    110

Lys Pro Cys Leu Lys Gln Thr Cys Met Lys Phe Tyr Ala Arg Val Cys
        115                    120                    125

Arg Ser Ser Thr Gly Leu Val Gly His Gln Val Glu Glu Phe Leu Asn
    130                    135                    140

Gln Ser Ser Pro Phe Tyr Phe Trp Ile Asn Gly Asp Arg Ile Asp Ser
145                    150                    155                    160

Leu Leu Glu Asn Asp Arg Gln Gln Thr His Ala Leu Asp Val Met Gln
                165                    170                    175

Asp Ser Phe Asp Arg Ala Ser Ser Ile Met Asp Glu Leu Phe Gln Asp
                180                    185                    190

Arg Phe Glu Thr Arg Glu Ala Gln Asp Pro Phe His Phe Ser Pro Phe
        195                    200                    205

Ser Ser Phe Gln Arg Arg Pro Phe Phe Phe Asn Ile Lys His Arg Phe
    210                    215                    220

Ala Arg Asn Ile Met Pro Phe Pro Gly Tyr Gln Pro Leu Asn Phe His
225                    230                    235                    240

Asp Met Phe Gln Pro Phe Phe Asp Met Ile His Gln Ala Gln Asn Ala
                245                    250                    255

Met Asp Val Asn Leu His Arg Leu Pro His Phe Pro Met Glu Phe Thr
        260                    265                    270

Glu Glu Asp Asn Gln Asp Gly Ala Val Cys Lys Glu Ile Arg His Asn
    275                    280                    285

Ser Thr Gly Cys Leu Lys Met Lys Asp Gln Cys Glu Lys Cys Arg Glu
    290                    295                    300

Ile Leu Ser Val Asp Cys Ser Ser Asn Asn Pro Ala Gln Val Gln Leu
305                    310                    315                    320

Arg Gln Glu Leu Asn Asn Ser Leu Gln Ile Ala Glu Lys Phe Thr Lys
                325                    330                    335

Leu Val Arg Arg Ala Ala Ala Val Leu Pro Gly Glu Asp Val Gln His
        340                    345                    350

Val Leu Pro Ala Glu Ala Ala Gly Arg Ala Val
        355                    360


<210> 35
<211> 766
<212> PRT
<213> Homo sapiens

<400> 35
Met Ile Trp Arg Ser Arg Ala Gly Ala Glu Leu Phe Ser Leu Met Ala
```

```
  1                   5                   10                          15

Leu Trp Glu Trp Ile Ala Leu Ser Leu His Cys Trp Val Leu Ala Val
                20                  25                  30

Ala Ala Val Ser Asp Gln His Ala Thr Ser Pro Phe Asp Trp Leu Leu
            35                  40                  45

Ser Asp Lys Gly Pro Phe His Arg Ser Gln Glu Tyr Thr Asp Phe Val
        50                  55                  60

Asp Arg Ser Arg Gln Gly Phe Ser Thr Arg Tyr Lys Ile Tyr Arg Glu
 65                  70                  75                      80

Phe Gly Arg Trp Lys Val Asn Asn Leu Ala Val Glu Arg Arg Asn Phe
                85                  90                  95

Leu Gly Ser Pro Leu Pro Leu Ala Pro Glu Phe Phe Arg Asn Ile Arg
            100                 105                 110

Leu Leu Gly Arg Arg Pro Thr Leu Gln Gln Ile Thr Glu Asn Leu Ile
        115                 120                 125

Lys Lys Tyr Gly Thr His Phe Leu Leu Ser Ala Thr Leu Gly Gly Glu
    130                 135                 140

Glu Ser Leu Thr Ile Pro Val Asp Lys Arg Lys Leu Ser Lys Arg Ala
145                 150                 155                     160

Glu Gly Ser Asp Ser Thr Thr Asn Ser Ser Ser Val Thr Leu Glu Thr
            165                 170                 175

Leu His Gln Leu Ala Ala Ser Tyr Phe Ile Asp Arg Asp Ser Thr Leu
        180                 185                 190

Arg Arg Leu His His Ile Gln Ile Ala Ser Thr Ala Ile Lys Val Thr
        195                 200                 205

Glu Thr Arg Thr Gly Pro Leu Gly Cys Ser Asn Tyr Asp Asn Leu Asp
    210                 215                 220

Ser Val Ser Ser Val Leu Val Gln Ser Pro Glu Asn Lys Ile Gln Leu
225                 230                 235                     240

Gln Gly Leu Gln Val Leu Leu Pro Asp Tyr Leu Gln Glu Arg Phe Val
            245                 250                 255

Gln Ala Ala Leu Ser Tyr Ile Ala Cys Asn Ser Glu Gly Glu Phe Ile
        260                 265                 270

Cys Lys Glu Asn Asp Cys Trp Cys His Cys Gly Pro Lys Phe Pro Glu
    275                 280                 285

Cys Asn Cys Pro Ser Met Asp Ile Gln Ala Met Glu Glu Asn Leu Leu
    290                 295                 300

Arg Ile Thr Glu Thr Trp Lys Ala Tyr Asn Ser Asp Phe Glu Glu Ser
305                 310                 315                     320
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Asp Glu Phe Lys Leu Phe Met Lys Arg Leu Pro Met Asn Tyr Phe Leu
                325   330   335

Asn Thr Ser Thr Ile Met His Leu Trp Thr Met Asp Ser Asn Phe Gln
            340   345   350

Arg Arg Tyr Glu Gln Leu Glu Asn Ser Met Lys Gln Leu Phe Leu Lys
        355   360   365

Ala Gln Lys Ile Val His Lys Leu Phe Ser Leu Ser Lys Arg Cys His
    370   375   380

Lys Gln Pro Leu Ile Ser Leu Pro Arg Gln Arg Thr Ser Thr Tyr Trp
385   390   395   400

Leu Thr Arg Ile Gln Ser Phe Leu Tyr Cys Asn Glu Asn Gly Leu Leu
            405   410   415

Gly Ser Phe Ser Glu Glu Thr His Ser Cys Thr Cys Pro Asn Asp Gln
            420   425   430

Val Val Cys Thr Ala Phe Leu Pro Cys Thr Val Gly Asp Ala Ser Ala
        435   440   445

Cys Leu Thr Cys Ala Pro Asp Asn Arg Thr Arg Cys Gly Thr Cys Asn
    450   455   460

Thr Gly Tyr Met Leu Ser Gln Gly Leu Cys Lys Pro Glu Val Ala Glu
465   470   475   480

Ser Thr Asp His Tyr Ile Gly Phe Glu Thr Asp Leu Gln Asp Leu Glu
            485   490   495

Met Lys Tyr Leu Leu Gln Lys Thr Asp Arg Arg Ile Glu Val His Ala
            500   505   510

Ile Phe Ile Ser Asn Asp Met Gly Leu Asn Ser Trp Phe Asp Pro Ser
        515   520   525

Trp Arg Lys Arg Met Leu Leu Thr Leu Lys Ser Asn Lys Tyr Lys Ser
        530   535   540

Ser Leu Val His Met Ile Leu Gly Leu Ser Leu Gln Ile Cys Leu Thr
545   550   555   560

Lys Asn Ser Thr Leu Glu Pro Val Leu Ala Val Tyr Val Asn Pro Phe
                565   570   575

Gly Gly Ser His Ser Glu Ser Trp Phe Met Pro Val Asn Glu Asn Ser
            580   585   590

Phe Pro Asp Trp Glu Arg Thr Lys Leu Asp Leu Pro Leu Gln Cys Tyr
        595   600   605

Asn Trp Thr Leu Thr Leu Gly Asn Lys Trp Lys Thr Phe Phe Glu Thr
    610   615   620

```
Val His Ile Tyr Leu Arg Ser Arg Ile Lys Ser Asn Gly Pro Asn Gly
625                 630                 635                     640

Asn Glu Ser Ile Tyr Tyr Glu Pro Leu Glu Phe Ile Asp Pro Ser Arg
                    645                 650                 655

Asn Leu Gly Tyr Met Lys Ile Asn Asn Ile Gln Val Phe Gly Tyr Ser
            660                 665                 670

Met His Phe Asp Pro Glu Ala Ile Arg Asp Leu Ile Leu Gln Leu Asp
        675                 680                 685

Tyr Pro Tyr Thr Gln Gly Ser Gln Asp Ser Ala Leu Leu Gln Leu Leu
690                 695                 700

Glu Ile Arg Asp Arg Val Asn Lys Leu Ser Pro Pro Gly Gln Arg Arg
705                 710                 715                     720

Leu Asp Leu Phe Ser Cys Leu Leu Arg His Arg Leu Lys Leu Ser Thr
                725                 730                 735

Ser Glu Val Val Arg Ile Gln Ser Ala Leu Gln Ala Phe Asn Ala Lys
            740                 745                 750

Leu Pro Asn Thr Met Asp Tyr Asp Thr Thr Lys Leu Cys Ser
            755                 760                 765


<210> 36
<211> 208
<212> PRT
<213> Homo sapiens

<400> 36
Met Gly Leu Gly Ala Arg Gly Ala Trp Ala Ala Leu Leu Leu Gly Thr
  1                 5                 10                  15

Leu Gln Val Leu Ala Leu Leu Gly Ala Ala His Glu Ser Ala Ala Met
            20                  25                  30

Ala Ala Ser Ala Asn Ile Glu Asn Ser Gly Leu Pro His Asn Ser Ser
        35                  40                  45

Ala Asn Ser Thr Glu Thr Leu Gln His Val Pro Ser Asp His Thr Asn
    50                  55                  60

Glu Thr Ser Asn Ser Thr Val Lys Pro Pro Thr Ser Val Ala Ser Asp
 65                  70                  75                  80

Ser Ser Asn Thr Thr Val Thr Thr Met Lys Pro Thr Ala Ala Ser Asn
                85                  90                  95

Thr Thr Thr Pro Gly Met Val Ser Thr Asn Met Thr Ser Thr Thr Leu
            100                 105                 110

Lys Ser Thr Pro Lys Thr Thr Ser Val Ser Gln Asn Thr Ser Gln Ile
            115                 120                 125
```

Ser Thr Ser Thr Met Thr Val Thr His Asn Ser Ser Val Thr Ser Ala
        130   135   140

Ala Ser Ser Val Thr Ile Thr Thr Thr Met His Ser Glu Ala Lys Lys
145   150   155   160

Gly Ser Lys Phe Asp Thr Gly Ser Phe Val Gly Gly Ile Val Leu Thr
                165   170   175

Leu Gly Val Leu Ser Ile Leu Tyr Ile Gly Cys Lys Met Tyr Tyr Ser
            180   185   190

Arg Arg Gly Ile Arg Tyr Arg Thr Ile Asp Glu His Asp Ala Ile Ile
        195   200   205

<210> 37
<211> 605
<212> PRT
<213> Homo sapiens

<400> 37
Met Gly Arg Leu Leu Arg Ala Ala Arg Leu Pro Pro Leu Leu Ser Pro
  1   5   10   15

Leu Leu Leu Leu Leu Val Gly Gly Ala Phe Leu Gly Ala Cys Val Ala
            20   25   30

Gly Ser Asp Glu Pro Gly Pro Glu Gly Leu Thr Ser Thr Ser Leu Leu
            35   40   45

Asp Leu Leu Leu Pro Thr Gly Leu Glu Pro Leu Asp Ser Glu Glu Pro
        50   55   60

Ser Glu Thr Met Gly Leu Gly Gly Ala Gly Leu Gly Ala Pro Gly Ser Gly
65   70   75   80

Phe Pro Ser Glu Glu Asn Glu Glu Ser Arg Ile Leu Gln Pro Pro Gln
                85   90   95

Tyr Phe Trp Glu Glu Glu Glu Leu Asn Asp Ser Ser Leu Asp Leu
                100   105   110

Gly Pro Thr Ala Asp Tyr Val Phe Pro Asp Leu Thr Glu Lys Ala Gly
            115   120   125

Ser Ile Glu Asp Thr Ser Gln Ala Gln Glu Leu Pro Asn Leu Pro Ser
        130   135   140

Pro Leu Pro Lys Met Asn Leu Val Glu Pro Pro Trp His Met Pro Pro
145   150   155   160

Arg Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Arg Glu Lys Glu
                165   170   175

```
Glu Val Glu Lys Gln Glu Glu Glu Glu Glu Glu Glu Leu Leu Pro Val
            180                 185                 190

Asn Gly Ser Gln Glu Glu Ala Lys Pro Gln Val Arg Asp Phe Ser Leu
            195                 200                 205

Thr Ser Ser Ser Gln Thr Pro Gly Ala Thr Lys Ser Arg His Glu Asp
    210                 215                 220

Ser Gly Asp Gln Ala Ser Ser Gly Val Glu Val Glu Ser Ser Met Gly
225                 230                 235                 240

Pro Ser Leu Leu Leu Pro Ser Val Thr Pro Thr Thr Val Thr Pro Gly
                245                 250                 255

Asp Gln Asp Ser Thr Ser Gln Glu Ala Glu Ala Thr Val Leu Pro Ala
            260                 265                 270

Ala Gly Leu Gly Val Glu Phe Glu Ala Pro Gln Glu Ala Ser Glu Glu
            275                 280                 285

Ala Thr Ala Gly Ala Ala Gly Leu Ser Gly Gln His Glu Glu Val Pro
    290                 295                 300

Ala Leu Pro Ser Phe Pro Gln Thr Thr Ala Pro Ser Gly Ala Glu His
305                 310                 315                 320

Pro Asp Glu Asp Pro Leu Gly Ser Arg Thr Ser Ala Ser Ser Pro Leu
            325                 330                 335

Ala Pro Gly Asp Met Glu Leu Thr Pro Ser Ser Ala Thr Leu Gly Gln
            340                 345                 350

Glu Asp Leu Asn Gln Gln Leu Leu Gly Gln Ala Ala Ala Ala Gln
    355                 360                 365

Ser Arg Ile Pro Trp Asp Ser Thr Gln Val Ile Cys Lys Asp Trp Ser
    370                 375                 380

Asn Leu Ala Gly Lys Asn Tyr Ile Ile Leu Asn Met Thr Glu Asn Ile
385                 390                 395                 400

Asp Cys Glu Val Phe Arg Gln His Arg Gly Pro Gln Leu Leu Ala Leu
                405                 410                 415

Val Glu Glu Val Leu Pro Arg His Gly Ser Gly His His Gly Ala Trp
            420                 425                 430

His Ile Ser Leu Ser Lys Pro Glu Lys Glu Gln His Leu Leu Met
    435                 440                 445

Thr Leu Val Gly Glu Gln Gly Val Val Pro Thr Gln Asp Val Leu Ser
    450                 455                 460

Met Leu Gly Asp Ile Arg Arg Ser Leu Glu Glu Ile Gly Ile Gln Asn
465                 470                 475                 480

Tyr Ser Thr Thr Ser Ser Cys Gln Ala Arg Ala Ser Gln Val Arg Ser
```

```
                    485                   490                   495
Asp Tyr Gly Thr Leu Phe Val Val Leu Val Val Ile Gly Ala Ile Cys
            500                   505                   510
Ile Ile Ile Ile Ala Leu Gly Leu Leu Tyr Asn Cys Trp Gln Arg Arg
            515                   520                   525
Leu Pro Lys Leu Lys His Val Ser His Gly Glu Glu Leu Arg Phe Val
        530                   535                   540
Glu Asn Gly Cys His Asp Asn Pro Thr Leu Asp Val Ala Ser Asp Ser
545                   550                   555                   560
Gln Ser Glu Met Gln Glu Lys His Pro Ser Leu Asn Gly Gly Gly Ala
                565                   570                   575
Leu Asn Gly Pro Gly Ser Trp Gly Ala Leu Met Gly Gly Lys Arg Asp
            580                   585                   590
Pro Glu Asp Ser Asp Val Phe Glu Glu Asp Thr His Leu
        595                   600                   605


<210> 38
<211> 86
<212> PRT
<213> Homo sapiens

<400> 38
Met Tyr Lys Leu Glu Leu Ile Phe Pro Thr Ala Leu Val Leu Pro Ile
 1               5                   10                  15
Leu Val Asn Gly Thr Val Ile Cys Pro Leu Lys Ala Arg Asn Ser Val
            20                  25                  30
Ile Pro Ser Ser Ser Phe Leu Thr Ser Leu Gln Leu Thr Ile Trp Ile
        35                  40                  45
Gln Pro Cys Leu Phe Leu Pro Thr Thr Thr Gly Leu Ser Ser Gly Tyr
    50                  55                  60
His Thr Phe Leu Ser Gly Leu His Ser Cys His Ile Ser Phe Ala Thr
 65                  70                  75                  80
Ala Ile Pro Gly Cys Leu
                85


<210> 39
<211> 158
<212> PRT
<213> Homo sapiens

<400> 39
Met Ala Ala Ala Ser Ala Gly Ala Thr Arg Leu Leu Leu Leu Leu Leu
 1               5                   10                  15
```

```
Met Ala Val Ala Ala Pro Ser Arg Ala Arg Gly Ser Gly Cys Arg Ala
            20                  25                  30

Gly Thr Gly Ala Arg Gly Ala Gly Ala Glu Gly Arg Glu Gly Glu Ala
            35                  40                  45

Cys Gly Thr Val Gly Leu Leu Leu Glu His Ser Phe Glu Ile Asp Asp
        50                  55                  60

Ser Ala Asn Phe Arg Lys Arg Gly Ser Leu Leu Trp Asn Gln Gln Asp
65                  70                  75                  80

Gly Thr Leu Ser Leu Ser Gln Arg Gln Leu Ser Glu Glu Glu Arg Gly
                85                  90                  95

Arg Leu Arg Asp Val Ala Ala Ser Tyr Leu Asp Cys Gly Ala Thr Arg
            100                 105                 110

Ala Cys Gly Pro Leu Leu Cys Ala Thr Leu Pro Val Ser Leu Phe Lys
            115                 120                 125

Asn Ile Asp Asp Thr Leu Lys Cys Val Asn Val Leu Lys Ser Tyr Ser
            130                 135                 140

Phe Gln Gln Pro Lys Ala Thr Val Val Leu Ala Arg Arg Ser
145                 150                 155
```

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<210> 40
<211> 58
<212> PRT
<213> Homo sapiens

<400> 40
Met Thr Lys Ala Leu Ile Pro Thr Pro Phe Phe Leu Ala Ala Met Trp
  1               5                   10                  15

Pro Leu Trp Gln His Ser Trp Ala Gln Thr Leu Arg Ser Gln Arg Gln
                20                  25                  30

Glu Ala Asp Ala Trp Ala Lys Ala Gly Ala Gly Asn Ser Arg Gly Ser
            35                  40                  45

Leu Ala Trp Arg Leu Leu Met Ser Ser Gly
        50                  55
```

```
<210> 41
<211> 432
<212> PRT
<213> Homo sapiens

<400> 41
Met Asp Ala Arg Trp Trp Ala Val Val Val Leu Ala Ala Phe Pro Ser
  1               5                   10                  15

Leu Gly Ala Gly Gly Glu Thr Pro Glu Ala Pro Pro Glu Ser Trp Thr
            20                  25                  30
```

```
Gln Leu Trp Phe Phe Arg Phe Val Val Asn Ala Ala Gly Tyr Ala Ser
        35                      40                  45

Phe Met Val Pro Gly Tyr Leu Leu Val Gln Tyr Phe Arg Arg Lys Asn
    50                  55                  60

Tyr Leu Glu Thr Gly Arg Gly Leu Cys Phe Pro Leu Val Lys Ala Cys
65                  70                  75                      80

Val Phe Gly Asn Glu Pro Lys Ala Ser Asp Glu Val Pro Leu Ala Pro
                85                  90                  95

Arg Thr Glu Ala Ala Glu Thr Thr Pro Met Trp Gln Ala Leu Lys Leu
            100                 105                 110

Leu Phe Cys Ala Thr Gly Leu Gln Val Ser Tyr Leu Thr Trp Gly Val
        115                 120                 125

Leu Gln Glu Arg Val Met Thr Arg Ser Tyr Gly Ala Thr Ala Thr Ser
130                 135                 140

Pro Gly Glu Arg Phe Thr Asp Ser Gln Phe Leu Val Leu Met Asn Arg
145                 150                 155                 160

Val Leu Ala Leu Ile Val Ala Gly Leu Ser Cys Val Leu Cys Lys Gln
                165                 170                 175

Pro Arg His Gly Ala Pro Met Tyr Arg Tyr Ser Phe Ala Ser Leu Ser
            180                 185                 190

Asn Val Leu Ser Ser Trp Cys Gln Tyr Glu Ala Leu Lys Phe Val Ser
        195                 200                 205

Phe Pro Thr Gln Val Leu Ala Lys Ala Ser Lys Val Ile Pro Val Met
    210                 215                 220

Leu Met Gly Lys Leu Val Ser Arg Arg Ser Tyr Glu His Trp Glu Tyr
225                 230                 235                 240

Leu Thr Ala Thr Leu Ile Ser Ile Gly Val Ser Met Phe Leu Leu Ser
            245                 250                 255

Ser Gly Pro Glu Pro Arg Ser Ser Pro Ala Thr Thr Leu Ser Gly Leu
        260                 265                 270

Ile Leu Leu Ala Gly Tyr Ile Ala Phe Asp Ser Phe Thr Ser Asn Trp
        275                 280                 285

Gln Asp Ala Leu Phe Ala Tyr Lys Met Ser Ser Val Gln Met Met Phe
    290                 295                 300

Gly Val Asn Phe Phe Ser Cys Leu Phe Thr Val Gly Ser Leu Leu Glu
305                 310                 315                 320

Gln Gly Ala Leu Leu Glu Gly Thr Arg Phe Met Gly Arg His Ser Glu
            325                 330                 335
```

```
Phe Ala Ala His Ala Leu Leu Leu Ser Ile Cys Ser Ala Cys Gly Gln
            340                 345                 350

Leu Phe Ile Phe Tyr Thr Ile Gly Gln Phe Gly Ala Ala Val Phe Thr
            355                 360                 365

Ile Ile Met Thr Leu Arg Gln Ala Phe Ala Ile Leu Leu Ser Cys Leu
    370                 375                 380

Leu Tyr Gly His Thr Val Thr Val Val Gly Gly Leu Gly Val Ala Val
385                 390                 395                 400

Val Phe Ala Ala Leu Leu Leu Arg Val Tyr Ala Arg Gly Arg Leu Lys
                405                 410                 415

Gln Arg Gly Lys Lys Ala Val Pro Val Glu Ser Pro Val Gln Lys Val
            420                 425                 430
```

```
<210> 42
<211> 131
<212> PRT
<213> Homo sapiens

<400> 42
Met Ser Leu Ala Gln Arg Val Leu Leu Thr Trp Leu Phe Thr Leu Leu
  1               5                   10                  15

Phe Leu Ile Met Leu Val Leu Lys Leu Asp Glu Lys Ala Pro Trp Asn
            20                  25                  30

Trp Phe Leu Ile Phe Ile Pro Val Trp Ile Phe Asp Thr Ile Leu Leu
            35                  40                  45

Val Leu Leu Ile Val Lys Met Ala Gly Arg Cys Lys Ser Gly Phe Asp
    50                  55                  60

Pro Arg His Gly Ser His Asn Ile Lys Lys Lys Ala Trp Tyr Leu Ile
65                  70                  75                  80

Ala Met Leu Leu Lys Leu Ala Phe Cys Leu Ala Leu Cys Ala Lys Leu
                85                  90                  95

Glu Gln Phe Thr Thr Met Asn Leu Ser Tyr Val Phe Ile Pro Leu Trp
            100                 105                 110

Ala Leu Leu Ala Gly Ala Leu Thr Glu Leu Gly Tyr Asn Val Phe Phe
            115                 120                 125

Val Arg Asp
    130
```

```
<210> 43
<211> 215
```

<210> PRT
<213> Homo sapiens

<400> 43
Met Arg Leu Pro Ala Trp Cys Arg His Thr Thr Leu Ala Ile Ser Cys
1   5   10   15

Trp His Cys Leu Val Leu Ala Arg Ala Ser Ala Asp Ser Ala Ser Leu
            20   25   30

Pro Thr Ile Ser His Leu Gly Val Lys Pro Leu Ser Val Gly Trp Gly
            35   40   45

Ala Pro Ser Thr Leu Pro Val Ser Pro Cys Gly Gly Lys Pro Ala Ala
    50   55   60

Pro Thr Ser Ala Ser Pro Ala Ala Ala Pro Leu Arg Phe Trp Arg Pro
65   70   75   80

Gly Ala Ser Gly Gly Gly Ala Gly Gly Thr Arg Arg Leu Ala Leu Cys
                85   90   95

Arg Leu Val Thr Ala Arg Thr Thr Leu Ala Thr Gly Thr Pro Gly Leu
            100   105   110

Ser Ala Arg Pro Arg Gln Arg Pro Cys Leu Leu Pro Val Leu Pro Arg
        115   120   125

Arg Pro Ala Glu Leu Ser Val Ser Leu Glu Pro Ser Pro Gly Ser Ser
    130   135   140

Gly Arg Gly Phe Leu Cys Leu Pro Phe Cys Lys Arg Asp Ala Asp Thr
145   150   155   160

Ser Leu Gly Gln Thr Leu Thr Ser Ser Cys Ser Leu Ser Ser Ile Leu
                165   170   175

Val Gly Gly Thr Leu Arg Pro Arg Cys Ser Cys Pro Pro Phe Thr Gln
            180   185   190

Arg Ser Ala Phe His Leu Arg Thr Pro His Asn Gln Tyr His His Gly
        195   200   205

Ser Thr Ser Leu Ala Ser His
    210   215

<210> 44
<211> 61
<212> PRT
<213> Homo sapiens

<400> 44
Met Lys Ser Ala Leu His Arg Asp Ile Cys Ile Leu Met Leu Thr Ala
1   5   10   15

Ala Leu Phe Thr Ile Ala Lys Thr Glu Lys Gln His Lys Cys Pro Ser
            20   25   30

Ile Asp Glu Gln Ile Asn Asn Leu Gln Tyr Ile Cys Thr Met Glu Tyr
       35   40   45

His Ser Ala Leu Gln Lys Glu Met Leu Leu Tyr Leu Gln
    50   55   60

<210> 45
<211> 125
<212> PRT
<213> Homo sapiens

<400> 45
Met Ile Pro Phe Pro Ala Cys Leu Leu Leu Ala Leu Phe Pro Lys Val
  1   5   10   15

Gln Val Gly Arg Thr Thr Ser Ala Tyr Phe Ser Thr Ile Pro Ser Met
               20   25   30

Pro Ala Arg Ser Gln Ile Asn Leu Pro Val Glu Ser Gly Ser Ala Leu
           35   40   45

Leu Glu Pro Arg Gly Lys Gly Arg Val Glu Arg Val Cys Pro Val Ala
       50   55   60

Trp Ser Ser Met Val Ala Ser Cys Leu Pro Ser Pro Ser Ser Gly Gly
 65   70   75   80

Pro Glu Gly Ser Leu Gly Thr Val Pro Gln Ile Leu Thr Gln Gly Pro
                85   90   95

Ala Trp Gly Arg Asp Gly Cys Arg Gln Asn Ala Leu Tyr Arg Asp Phe
               100   105   110

Leu Leu Leu Gly Arg Cys Val Ser Pro Thr Ile Cys Leu
           115   120   125

<210> 46
<211> 71
<212> PRT
<213> Homo sapiens

<400> 46
Met Leu Val Ala Ala Ile Val Phe Ile Ser Phe Gly Val Val Ala Ala
  1   5   10   15

Phe Cys Cys Ala Ile Val Asp Gly Val Phe Ala Ala Gln His Ile Glu
               20   25   30

Pro Lys Ala Pro His His Gly Lys Met Pro Val Tyr Ser Ser Gly Val
           35   40   45

Gly Tyr Leu Tyr Asp Val Tyr Gln Thr Glu Val Ser Arg Ser Thr Glu
       50   55   60

Ile His Val Gly Leu Leu Asn

65   70

<210> 47
<211> 69
<212> PRT
<213> Homo sapiens

<400> 47
Met Lys Ala Val Val Leu Leu Lys Ala Phe Ser Phe Ser Leu Cys Ser
 1   5   10   15

Ala Ile Ser Pro Val Thr Pro Gly Phe Arg Gln Thr Ile Asn Val Leu
            20   25   30

Asp Thr Val Ala Phe Ser Ala Phe Phe Ile Tyr Leu Phe Thr Val Thr
        35   40   45

Ala Ser Ile Asn Phe Tyr Ala Tyr Phe Ser Ser Phe Leu Ala Gly Ala
    50   55   60

Pro Phe Ile Lys Ile
 65

<210> 48
<211> 85
<212> PRT
<213> Homo sapiens

<400> 48
Met Ala Ala Gly Gly Cys Leu Leu Leu Leu Ala Phe Phe Pro Leu Ser
 1   5   10   15

Arg Gly Ser His Phe His Leu Gln Lys Arg Ala Leu Ala Glu Ala Ser
            20   25   30

Phe Glu Ala Thr Leu Cys Glu Leu Phe Val Ile Glu Thr Ala Ser Lys
        35   40   45

Gly Thr Leu Leu Ile Ile Thr Ile Arg His Leu Val Thr Tyr Ile Ile
    50   55   60

Val Ile Phe Lys Cys His Met Leu Lys Asn Glu Met Asn Ser Ser Ile
 65   70   75   80

Lys Pro His Phe Gln
                85

<210> 49
<211> 150
<212> PRT
<213> Homo sapiens

<400> 49
Met Val Met Ile Leu Phe Val Ala Phe Ile Thr Cys Trp Glu Glu Val
 1   5   10   15

Thr Thr Leu Val Gln Ala Ile Arg Ile Thr Ser Tyr Met Asn Glu Thr
            20   25   30

Ile Leu Tyr Phe Pro Phe Ser Ser His Ser Ser Tyr Thr Val Arg Ser
            35   40   45

Lys Lys Ile Phe Leu Ser Lys Leu Ile Val Cys Phe Leu Ser Thr Trp
        50   55   60

Leu Pro Phe Val Leu Leu Gln Val Ile Ile Val Leu Leu Lys Val Gln
65   70   75   80

Ile Pro Ala Tyr Ile Glu Met Asn Ile Pro Trp Leu Tyr Phe Val Asn
                    85   90   95

Ser Phe Leu Ile Ala Thr Val Tyr Trp Phe Asn Cys His Lys Leu Asn
            100   105   110

Leu Lys Asp Ile Gly Leu Pro Leu Asp Pro Phe Val Asn Trp Lys Cys
            115   120   125

Cys Phe Ile Pro Leu Thr Ile Pro Asn Leu Glu Gln Ile Glu Lys Pro
    130   135   140

Ile Ser Ile Met Ile Cys
145   150

<210> 50
<211> 298
<212> PRT
<213> Homo sapiens

<400> 50
Met Lys Thr Leu Gln Ser Thr Leu Leu Leu Leu Leu Leu Val Pro Leu
  1   5   10   15

Ile Lys Pro Ala Pro Pro Thr Gln Gln Asp Ser Arg Ile Ile Tyr Asp
                20   25   30

Tyr Gly Thr Asp Asn Phe Glu Glu Ser Ile Phe Ser Gln Asp Tyr Glu
            35   40   45

Asp Lys Tyr Leu Asp Gly Lys Asn Ile Lys Glu Lys Thr Val Ile
        50   55   60

Ile Pro Asn Glu Lys Ser Leu Gln Leu Gln Lys Asp Glu Ala Ile Thr
65   70   75   80

Pro Leu Pro Pro Lys Lys Glu Asn Asp Glu Met Pro Thr Cys Leu Leu
                    85   90   95

Cys Val Cys Leu Ser Gly Ser Val Tyr Cys Glu Glu Val Asp Ile Asp
            100   105   110

Ala Val Pro Pro Leu Pro Lys Glu Ser Ala Tyr Leu Tyr Ala Arg Phe
            115   120   125

Asn Lys Ile Lys Lys Leu Thr Ala Lys Asp Phe Ala Asp Ile Pro Asn
    130   135   140

Leu Arg Arg Leu Asp Phe Thr Gly Asn Leu Ile Glu Asp Ile Glu Asp
145   150   155   160

Gly Thr Phe Ser Lys Leu Ser Leu Leu Glu Glu Leu Ser Leu Ala Glu
                165   170   175

Asn Gln Leu Leu Lys Leu Pro Val Leu Pro Pro Lys Leu Thr Leu Phe
        180   185   190

Asn Ala Lys Tyr Asn Lys Ile Lys Ser Arg Gly Ile Lys Ala Asn Ala
        195   200   205

Phe Lys Lys Leu Asn Asn Leu Thr Phe Leu Tyr Leu Asp His Asn Ala
    210   215   220

Leu Glu Ser Val Pro Leu Asn Leu Pro Glu Ser Leu Arg Val Ile His
225   230   235   240

Leu Gln Phe Asn Asn Ile Ala Ser Ile Thr Asp Asp Thr Phe Cys Lys
                245   250   255

Ala Asn Asp Thr Ser Tyr Ile Arg Asp Arg Ile Glu Glu Ile Arg Leu
        260   265   270

Glu Gly Asn Pro Ile Val Leu Gly Lys His Pro Asn Ser Phe Ile Cys
        275   280   285

Leu Lys Arg Leu Pro Ile Gly Ser Tyr Phe
    290   295

<210> 51
<211> 57
<212> PRT
<213> Homo sapiens

<400> 51
Met Leu Asp Leu Ser Pro Ser Leu Thr Leu Lys Phe Cys Phe Leu His
  1   5   10   15

Leu Val Phe Leu Pro Phe Lys Val Tyr Cys Gln Leu Leu Gln Glu Leu
                20   25   30

Leu Ser Lys Pro Val Ser Lys Leu Pro Leu Thr Pro Gln Cys Gln Ser
            35   40   45

Trp Ala Arg Pro Leu Gly Asp Leu Glu
        50   55

<210> 52
<211> 145
<212> PRT
<213> Homo sapiens

```
<400> 52
Met Leu Arg Thr Leu Val Leu Lys Gln Thr Leu Asp Leu Leu Leu Pro
 1               5                  10                  15

Leu Leu Glu Ala Leu Leu Val Leu Gly Val Pro Gln His Leu Glu Leu
            20                  25                  30

Gln Pro Leu Pro Val Gln Val Ser Leu Leu Leu Gln Leu Leu Asp
        35                  40                  45

Leu Gly Ser Leu Lys Ser His Arg Leu His His Phe His Ser Lys Ala
    50                  55                  60

Leu Gln Leu Pro Val Leu Asp His Leu Asp Phe Gln Asp Phe Gln Leu
65                  70                  75                  80

Pro Trp Gln Gln Val Leu Ser Glu Leu Pro Val Ala Pro Ala Phe Gly
                85                  90                  95

Gly Gly Ser Ser Val Ala Gly Phe Gly Ser Pro Gly Leu Thr Phe Ser
            100                 105                 110

His Trp Leu Phe Leu Ser His Pro Val Asp Thr Phe Gly Asn Ser Gln
        115                 120                 125

Ala Tyr Pro Thr Ser Leu Ser Ala Leu Gln Ala Ser Ile Asn Cys Asn
    130                 135                 140

Arg
145


<210> 53
<211> 139
<212> PRT
<213> Homo sapiens

<400> 53
Met Lys Thr Leu Leu Leu Leu Val Gly Leu Leu Leu Thr Trp Glu Asn
 1               5                  10                  15

Gly Arg Val Leu Gly Asp Gln Met Val Ser Asp Thr Glu Leu Gln Glu
            20                  25                  30

Met Ser Thr Glu Gly Ser Lys Tyr Ile Asn Arg Glu Ile Lys Asn Ala
        35                  40                  45

Leu Lys Leu Gly Val Lys Gln Ile Lys Thr Leu Ile Glu Gln Thr Asn Glu
    50                  55                  60

Glu Arg Lys Ser Leu Leu Thr Asn Leu Glu Glu Ala Lys Lys Lys Lys
65                  70                  75                  80

Glu Asp Ala Leu Asn Asp Thr Lys Asp Ser Glu Met Lys Leu Lys Ala
            85                  90                  95

Ser Gln Gly Val Cys Asn Asp Thr Met Met Ala Leu Trp Glu Glu Cys
```

```
              100                  105                  110
Lys Pro Cys Leu Lys Gln Thr Trp Gly Lys Gly Leu Arg Pro Ser Leu
        115             120             125

Gln Lys Gln His Arg Ala Gly Trp Pro Pro Gly
    130             135


<210> 54
<211> 432
<212> PRT
<213> Homo sapiens

<400> 54
Met Asp Ala Arg Trp Trp Ala Val Val Val Leu Ala Ala Phe Pro Ser
 1               5                  10                  15

Leu Gly Ala Gly Gly Glu Thr Pro Glu Ala Pro Pro Glu Ser Trp Thr
              20                  25                  30

Gln Leu Trp Phe Phe Arg Phe Val Val Asn Ala Ala Gly Tyr Ala Ser
        35                  40                  45

Phe Met Val Pro Gly Tyr Leu Leu Val Gln Tyr Phe Arg Arg Lys Asn
    50                  55                  60

Tyr Leu Glu Thr Gly Arg Gly Leu Cys Phe Pro Leu Val Lys Ala Cys
65                  70                  75                  80

Val Phe Gly Asn Glu Pro Lys Ala Ser Asp Glu Val Pro Leu Ala Pro
              85                  90                  95

Arg Thr Glu Ala Ala Glu Thr Thr Pro Met Trp Gln Ala Leu Lys Leu
          100                 105                 110

Leu Phe Cys Ala Thr Gly Leu Gln Val Ser Tyr Leu Thr Trp Gly Val
        115                 120                 125

Leu Gln Glu Arg Val Met Thr Arg Ser Tyr Gly Ala Thr Ala Thr Ser
    130                 135                 140

Pro Gly Glu Arg Phe Thr Asp Ser Gln Phe Leu Val Leu Met Asn Arg
145                 150                 155                 160

Val Leu Ala Leu Ile Val Ala Gly Leu Ser Cys Val Leu Cys Lys Gln
              165                 170                 175

Pro Arg His Gly Ala Pro Met Tyr Arg Tyr Ser Phe Ala Ser Leu Ser
          180                 185                 190

Asn Val Leu Ser Ser Trp Cys Gln Tyr Glu Ala Leu Lys Phe Val Ser
        195                 200                 205

Phe Pro Thr Gln Val Leu Ala Lys Ala Ser Lys Val Ile Pro Val Met
    210                 215                 220

Leu Met Gly Lys Leu Val Ser Arg Arg Ser Tyr Glu His Trp Glu Tyr
```

```
225                     230                     235                     240
Leu Thr Ala Thr Leu Ile Ser Ile Gly Val Ser Met Phe Leu Leu Ser
                245                     250                     255

Ser Gly Pro Glu Pro Arg Ser Ser Pro Ala Thr Thr Leu Ser Gly Leu
                260                     265                     270

Ile Leu Leu Ala Gly Tyr Ile Ala Phe Asp Ser Phe Thr Ser Asn Trp
            275                     280                     285

Gln Asp Ala Leu Phe Ala Tyr Lys Met Ser Ser Val Gln Met Met Phe
    290                     295                     300

Gly Val Asn Phe Phe Ser Cys Leu Phe Thr Val Gly Ser Leu Leu Glu
305                     310                     315                     320

Gln Gly Ala Leu Leu Glu Gly Thr Arg Phe Met Gly Arg His Ser Glu
                325                     330                     335

Phe Ala Ala His Ala Leu Leu Leu Ser Ile Cys Ser Ala Cys Gly Gln
            340                     345                     350

Leu Phe Ile Phe Tyr Thr Ile Gly Gln Phe Gly Ala Ala Val Phe Thr
            355                     360                     365

Ile Ile Met Thr Leu Arg Gln Ala Phe Ala Ile Leu Leu Ser Cys Leu
    370                     375                     380

Leu Tyr Gly His Thr Val Thr Val Val Gly Gly Leu Gly Val Ala Val
385                     390                     395                     400

Val Phe Ala Ala Leu Leu Leu Arg Val Tyr Ala Arg Gly Arg Leu Lys
                405                     410                     415

Gln Arg Gly Lys Lys Ala Val Pro Val Glu Ser Pro Val Gln Lys Val
                420                     425                     430
```

```
Met Arg Met Ser Leu Ala Gln Arg Val Leu Leu Thr Trp Leu Phe Thr
  1               5                     10                      15

Leu Leu Phe Leu Ile Met Leu Val Leu Lys Leu Asp Glu Lys Ala Pro
            20                      25                      30

Trp Asn Trp Phe Leu Ile Phe Ile Pro Val Trp Ile Phe Asp Thr Ile
            35                      40                      45

Leu Leu Val Leu Leu Ile Val Lys Met Ala Gly Arg Cys Lys Ser Gly
```

```
          50                    55                    60
Phe Asp Pro Arg His Gly Ser His Asn Ile Lys Lys Lys Ala Trp Tyr
 65                    70                    75                    80

Leu Ile Ala Met Leu Leu Lys Leu Ala Phe Cys Leu Ala Leu Cys Ala
                     85                    90                    95

Lys Leu Glu Gln Phe Thr Thr Met Asn Leu Ser Tyr Val Phe Ile Pro
                100                   105                   110

Leu Trp Ala Leu Leu Ala Gly Ala Leu Thr Glu Leu Gly Tyr Asn Val
            115                   120                   125

Phe Phe Val Arg Asp
            130
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<210> 56
<211> 77
<212> PRT
<213> Homo sapiens

<400> 56
Met Ala Ile Cys Gln Phe Phe Leu Gln Gly Arg Cys Arg Phe Gly Asp
 1                   5                    10                    15

Arg Cys Trp Asn Glu His Pro Gly Ala Arg Gly Ala Gly Gly Gly Arg
                20                    25                    30

Gln Gln Pro Gln Gln Gln Pro Ser Gly Asn Asn Arg Arg Gly Trp Asn
                35                    40                    45

Thr Thr Ser Gln Arg Tyr Ser Asn Val Ile Gln Pro Ser Ser Phe Ser
        50                    55                    60

Lys Ser Thr Pro Trp Gly Gly Ser Arg Asp Gln Glu Thr
 65                   70                    75
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<210> 57
<211> 247
<212> PRT
<213> Homo sapiens

<400> 57
Asn Arg Pro Gly Gly Arg Val Tyr Ala Arg Val Cys Arg Ser Ser Thr
 1                   5                    10                    15

Gly Leu Val Gly His Gln Val Glu Glu Phe Leu Asn Gln Ser Ser Pro
                20                    25                    30

Phe Tyr Phe Trp Ile Asn Gly Asp Arg Ile Asp Ser Leu Leu Glu Asn
        35                    40                    45

Asp Arg Gln Gln Thr His Ala Leu Asp Val Met Gln Asp Ser Phe Asp
        50                    55                    60
```

Arg Ala Ser Ser Ile Met Asp Glu Leu Phe Gln Asp Arg Phe Phe Thr
65   70   75   80

Arg Glu Ala Gln Asp Pro Phe His Phe Ser Pro Phe Ser Ser Phe Gln
                85   90   95

Arg Arg Pro Phe Phe Phe Asn Ile Lys His Arg Phe Ala Arg Asn Ile
        100   105   110

Met Pro Phe Pro Gly Tyr Gln Pro Leu Asn Phe His Asp Met Phe Gln
        115   120   125

Pro Phe Phe Asp Met Ile His Gln Ala Gln Gln Ala Met Asp Val Asn
        130   135   140

Leu His Arg Leu Pro His Phe Pro Met Glu Phe Thr Glu Glu Asp Asn
145   150   155   160

Gln Asp Gly Ala Val Cys Lys Glu Ile Arg His Asn Ser Thr Gly Cys
                165   170   175

Leu Lys Met Lys Asp Gln Cys Glu Lys Cys Arg Glu Ile Leu Ser Val
        180   185   190

Asp Cys Ser Ser Asn Asn Pro Ala Gln Val Gln Leu Arg Gln Glu Leu
        195   200   205

Asn Asn Ser Leu Gln Ile Ala Glu Lys Phe Thr Lys Leu Val Arg Arg
        210   215   220

Ala Ala Ala Val Leu Pro Gly Glu Asp Val Gln His Val Leu Pro Ala
225   230   235   240

Glu Ala Ala Gly Arg Ala Val
                245

<210> 58
<211> 85
<212> PRT
<213> Homo sapiens

<400> 58
Met Ala Val Ala Lys Asp Met Trp Gln Glu Cys Asn Pro Asp Lys Lys
1   5   ·10   15

Val Trp Tyr Pro Glu Leu Lys Pro Val Val Val Gly Arg Lys Arg Gln
                20   25   30

Gly Cys Ile His Met Val Asn Cys Ser Glu Val Arg Lys Glu Glu Leu
        35   40   45

Gly Ile Thr Glu Phe Leu Ala Leu Ser Gly Gln Met Thr Val Pro Leu
        50   55   60

Thr Lys Ile Gly Arg Thr Arg Ala Val Gly Lys Met Ser Ser Ser Leu
65   70   75   80

Tyr Met Leu Leu Phe
                 85

<210> 59
<211> 468
<212> PRT
<213> Homo sapiens

<400> 59
His Glu Gly Ser Leu Ala Ala Pro Gly Gly Gly Gly Ser Ala Gly
 1   5   10   15

Gly Ala Arg Pro Gly Asp Ser His Ser Pro Val Pro Pro Pro His
            20   25   30

Ala Ala Trp Thr Met Asp Ala Arg Trp Trp Ala Val Val Val Leu Ala
        35   40   45

Ala Phe Pro Ser Leu Gly Ala Gly Gly Glu Thr Pro Glu Ala Pro Pro
    50   55   60

Glu Ser Trp Thr Gln Leu Trp Phe Phe Arg Phe Val Val Asn Ala Ala
65   70   75   80

Gly Tyr Ala Ser Phe Met Val Pro Gly Tyr Leu Leu Val Gln Tyr Phe
            85   90   95

Arg Arg Lys Asn Tyr Leu Glu Thr Gly Arg Gly Leu Cys Phe Pro Leu
            100   105   110

Val Lys Ala Cys Val Phe Gly Asn Glu Pro Lys Ala Ser Asp Glu Val
    115   120   125

Pro Leu Ala Pro Arg Thr Glu Ala Ala Glu Thr Thr Pro Met Trp Gln
    130   135   140

Ala Leu Lys Leu Leu Phe Cys Ala Thr Gly Leu Gln Val Ser Tyr Leu
145   150   155   160

Thr Trp Gly Val Leu Gln Glu Arg Val Met Thr Arg Ser Tyr Gly Ala
            165   170   175

Thr Ala Thr Ser Pro Gly Glu Arg Phe Thr Asp Ser Gln Phe Leu Val
            180   185   190

Leu Met Asn Arg Val Leu Ala Leu Ile Val Ala Gly Leu Ser Cys Val
    195   200   205

Leu Cys Lys Gln Pro Arg His Gly Ala Pro Met Tyr Arg Tyr Ser Phe
    210   215   220

Ala Ser Leu Ser Asn Val Leu Ser Ser Trp Cys Gln Tyr Glu Ala Leu
225   230   235   240

Lys Phe Val Ser Phe Pro Thr Gln Val Leu Ala Lys Ala Ser Lys Val
            245   250   255

Ile Pro Val Met Leu Met Gly Lys Leu Val Ser Arg Arg Ser Tyr Glu
                260   265   270

His Trp Glu Tyr Leu Thr Ala Thr Leu Ile Ser Ile Gly Val Ser Met
        275   280   285

Phe Leu Leu Ser Ser Gly Pro Glu Pro Arg Ser Ser Pro Ala Thr Thr
    290   295   300

Leu Ser Gly Leu Ile Leu Leu Ala Gly Tyr Ile Ala Phe Asp Ser Phe
305   310   315   320

Thr Ser Asn Trp Gln Asp Ala Leu Phe Ala Tyr Lys Met Ser Ser Val
                325   330   335

Gln Met Met Phe Gly Val Asn Phe Phe Ser Cys Leu Phe Thr Val Gly
                340   345   350

Ser Leu Leu Glu Gln Gly Ala Leu Leu Glu Gly Thr Arg Phe Met Gly
        355   360   365

Arg His Ser Glu Phe Ala Ala His Ala Leu Leu Leu Ser Ile Cys Ser
    370   375   380

Ala Cys Gly Gln Leu Phe Ile Phe Tyr Thr Ile Gly Gln Phe Gly Ala
385   390   395   400

Ala Val Phe Thr Ile Ile Met Thr Leu Arg Gln Ala Phe Ala Ile Leu
                405   410   415

Leu Ser Cys Leu Leu Tyr Gly His Thr Val Thr Val Val Gly Gly Leu
                420   425   430

Gly Val Ala Val Val Phe Ala Ala Leu Leu Leu Arg Val Tyr Ala Arg
        435   440   445

Gly Arg Leu Lys Gln Arg Gly Lys Lys Ala Val Pro Val Glu Ser Pro
    450   455   460

Val Gln Lys Val
465

<210> 60
<211> 133
<212> PRT
<213> Homo sapiens

<400> 60
Met Arg Met Ser Leu Ala Gln Arg Val Leu Leu Thr Trp Leu Phe Thr
  1   5   10   15

Leu Leu Phe Leu Ile Met Leu Val Leu Lys Leu Asp Glu Lys Ala Pro
                20   25   30

Trp Asn Trp Phe Leu Ile Phe Ile Pro Val Trp Ile Phe Asp Thr Ile
        35   40   45

```
Leu Leu Val Leu Leu Ile Val Lys Met Ala Gly Arg Cys Lys Ser Gly
    50                  55                  60

Phe Asp Pro Arg His Gly Ser His Asn Ile Lys Lys Lys Ala Trp Tyr
65                  70                  75                  80

Leu Ile Ala Met Leu Leu Lys Leu Ala Phe Cys Leu Ala Leu Cys Ala
                85                  90                  95

Lys Leu Glu Gln Phe Thr Thr Met Asn Leu Ser Tyr Val Phe Ile Pro
            100                 105                 110

Leu Trp Ala Leu Leu Ala Gly Ala Leu Thr Glu Leu Gly Tyr Asn Val
            115                 120                 125

Phe Phe Val Arg Asp
    130
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<210> 61
<211> 75
<212> PRT
<213> Homo sapiens

<400> 61
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Met Phe Leu Pro Thr Phe Tyr Pro Glu Lys Arg Phe Ser Pro Lys Asp
1                   5                   10                  15

Ser Ala Gln Ser Val Pro Pro Trp Glu His Leu Pro Gly Gln Pro Leu
                20                  25                  30

Arg Ala His Trp Ala Ser Leu His His Thr Asn Thr Pro Val Pro His
            35                  40                  45

Trp Leu Ser Asp Tyr Met Ala Val Cys Leu Val Lys Lys Lys Asn Gln
    50                  55                  60

Lys Lys Lys Lys Gln Lys Lys Lys Lys Lys
65                  70                  75
```

<210> 62
<211> 93
<212> PRT
<213> Homo sapiens

<400> 62
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Val Gly Thr Ala Ile Met Glu Asn Ser Met Ala Val Pro Leu Lys Thr
1                   5                   10                  15

Glu Leu Pro Tyr Asp Pro Ala Ile Pro Leu Leu Ser Ile Pro Lys Glu
                20                  25                  30

Met Lys Ser Ala Leu His Arg Asp Ile Cys Ile Leu Met Leu Thr Ala
            35                  40                  45

Ala Leu Phe Thr Ile Ala Lys Thr Glu Lys Gln His Lys Cys Pro Ser
    50                  55                  60
```

Ile Asp Glu Gln Ile Asn Asn Leu Gln Tyr Ile Cys Thr Met Glu Tyr
 65   70   75   80

His Ser Ala Leu Gln Lys Glu Met Leu Leu Tyr Leu Gln
                    85   90

<210> 63
<211> 150
<212> PRT
<213> Homo sapiens

<400> 63
Ala Arg Gly Pro Leu Gly Leu Leu Asp Pro Ala Glu Gly Leu Ser Arg
 1   5   10   15

Arg Lys Lys Thr Ser Leu Trp Phe Val Gly Ser Leu Leu Leu Val Ser
                20   25   30

Val Leu Ile Val Thr Val Gly Leu Ala Ala Thr Thr Arg Thr Glu Asn
             35   40   45

Val Thr Val Gly Gly Tyr Tyr Pro Gly Ile Ile Leu Gly Phe Gly Ser
       50   55   60

Phe Leu Gly Ile Ile Gly Ile Asn Leu Val Glu Asn Arg Arg Gln Met
 65   70   75   80

Leu Val Ala Ala Ile Val Phe Ile Ser Phe Gly Val Val Ala Ala Phe
                85   90   95

Cys Cys Ala Ile Val Asp Gly Val Phe Ala Ala Gln His Ile Glu Pro
             100   105   110

Lys Ala Pro His His Gly Lys Met Pro Val Tyr Ser Ser Gly Val Gly
        115   120   125

Tyr Leu Tyr Asp Val Tyr Gln Thr Glu Val Ser Arg Ser Thr Glu Ile
     130   135   140

His Val Gly Leu Leu Asn
145   150

<210> 64
<211> 192
<212> PRT
<213> Homo sapiens

<400> 64
Thr Arg Pro Val Leu Ala Tyr Val Leu Gly Asp Pro Ala Ile Tyr Gln
 1   5   10   15

Ser Leu Lys Ala Gln Asn Ala Tyr Ser Arg His Cys Pro Phe Tyr Val
             20   25   30

Ser Ile Gln Ser Tyr Trp Leu Ser Phe Phe Met Val Met Ile Leu Phe

```
            35                    40                    45
Val Ala Phe Ile Thr Cys Trp Glu Glu Val Thr Thr Leu Val Gln Ala
       50                    55                    60

Ile Arg Ile Thr Ser Tyr Met Asn Glu Thr Ile Leu Tyr Phe Pro Phe
  65                    70                    75                    80

Ser Ser His Ser Ser Tyr Thr Val Arg Ser Lys Lys Ile Phe Leu Ser
                  85                    90                    95

Lys Leu Ile Val Cys Phe Leu Ser Thr Trp Leu Pro Phe Val Leu Leu
            100                   105                   110

Gln Val Ile Ile Val Leu Leu Lys Val Gln Ile Pro Ala Tyr Ile Glu
         115                   120                   125

Met Asn Ile Pro Trp Leu Tyr Phe Val Asn Ser Phe Leu Ile Ala Thr
    130                   135                   140

Val Tyr Trp Phe Asn Cys His Lys Leu Asn Leu Lys Asp Ile Gly Leu
145                   150                   155                   160

Pro Leu Asp Pro Phe Val Asn Trp Lys Cys Cys Phe Ile Pro Leu Thr
                 165                   170                   175

Ile Pro Asn Leu Glu Gln Ile Glu Lys Pro Ile Ser Ile Met Ile Cys
             180                   185                   190



<210> 65
<211> 269
<212> PRT
<213> Homo sapiens

<400> 65
Lys Lys Pro Asn Ile Ser Gly Phe Thr Asp Ile Ser Pro Glu Glu Leu
  1                    5                    10                   15

Arg Leu Glu Tyr His Asn Phe Leu Thr Ser Asn Asn Leu Gln Ser Tyr
                 20                    25                    30

Leu Asn Ser Val Gln Arg Leu Ile Asn Gln Trp Arg Asn Arg Val Asn
            35                    40                    45

Glu Leu Lys Ser Leu Asn Asn Ile Ser Thr Lys Val Ala Leu Leu Ser Asp
       50                    55                    60

Val Lys Asp Gly Val Asn Pro Ala Ala Pro Ala Phe Gly Phe Gly Ser
  65                    70                    75                    80

Ser Gln Ala Ala Thr Phe Met Ser Pro Gly Phe Pro Val Asn Asn Ser
                 85                    90                    95

Ser Ser Asp Asn Ala Gln Asn Phe Ser Phe Lys Thr Asn Ser Gly Phe
```

```
                100                105                110
Ala Ala Ala Ser Ser Gly Ser Pro Ala Gly Phe Gly Ser Ser Pro Ala
        115                120                125

Phe Gly Ala Ala Ala Ser Thr Ser Ser Gly Ile Ser Thr Ser Ala Pro
    130                135                140

Ala Phe Gly Phe Gly Lys Pro Glu Val Thr Ser Ala Ala Ser Phe Ser
145                150                155                160

Phe Lys Ser Pro Ala Ala Ser Ser Phe Gly Ser Pro Gly Phe Ser Gly
                165                170                175

Leu Pro Ala Ser Leu Ala Thr Gly Pro Val Arg Ala Pro Val Ala Pro
        180                185                190

Ala Phe Gly Gly Gly Ser Ser Val Ala Gly Phe Gly Ser Pro Gly Ser
        195                200                205

His Ser His Thr Ala Phe Ser Lys Pro Ser Ser Asp Thr Phe Gly Asn
    210                215                220

Ser Ser Ile Ser Thr Ser Leu Ser Ala Ser Ser Ser Ile Ile Ala Thr
225                230                235                240

Asp Asn Val Leu Phe Thr Pro Arg Asn Lys Leu Thr Val Glu Glu Leu
                245                250                255

Glu Gln Phe Gln Ser Lys Lys Phe Thr Leu Gly Lys Ile
        260                265
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<210> 66
<211> 300
<212> PRT
<213> Homo sapiens

<400> 66
Met Ser Ser Ser His Pro Val Ser Pro Asn Pro His His Gly Gly Ala
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Ala Glu Ile Lys Lys Pro Asn Ile Ser Gly Phe Thr Asp Ile Ser Pro
            20                25                30

Glu Glu Leu Arg Leu Glu Tyr His Asn Phe Leu Thr Ser Asn Asn Leu
        35                40                45

Gln Ser Tyr Leu Asn Ser Val Gln Arg Leu Ile Asn Gln Trp Arg Asn
    50                55                60

Arg Val Asn Glu Leu Lys Ser Leu Asn Ile Ser Thr Lys Val Ala Leu
65                70                75                80

Leu Ser Asp Val Lys Asp Gly Val Asn Pro Ala Ala Pro Ala Phe Gly
                85                90                95

Phe Gly Ser Ser Gln Ala Ala Thr Phe Met Ser Pro Gly Phe Pro Val
```

```
                 100                    105                    110
Asn Asn Ser Ser Ser Asp Asn Ala Gln Asn Phe Ser Phe Lys Thr Asn
         115                    120                    125

Ser Gly Phe Ala Ala Ala Ser Ser Gly Ser Pro Ala Gly Phe Gly Ser
     130                    135                    140

Ser Pro Ala Phe Gly Ala Ala Ala Ser Thr Ser Ser Gly Ile Ser Thr
145                    150                    155                    160

Ser Ala Pro Ala Phe Gly Phe Gly Lys Pro Glu Val Thr Ser Ala Ala
                 165                    170                    175

Ser Phe Ser Phe Lys Ser Pro Ala Ala Ser Ser Phe Gly Ser Pro Gly
             180                    185                    190

Phe Ser Gly Leu Pro Ala Ser Leu Ala Thr Gly Pro Val Arg Ala Pro
             195                    200                    205

Val Ala Pro Ala Phe Gly Gly Gly Ser Ser Val Ala Gly Phe Gly Ser
     210                    215                    220

Pro Gly Ser His Ser His Thr Ala Phe Ser Lys Pro Ser Ser Asp Thr
225                    230                    235                    240

Phe Gly Asn Ser Ser Ile Ser Thr Ser Ser Ala Ser Ser Ser Ile
                 245                    250                    255

Ile Ala Thr Asp Asn Val Leu Phe Thr Pro Arg Asn Lys Leu Thr Val
             260                    265                    270

Glu Glu Leu Glu Gln Phe Gln Ser Lys Lys Phe Thr Leu Gly Lys Ile
         275                    280                    285

Pro Leu Lys Pro Pro Pro Leu Glu Leu Leu Asn Val
     290                    295                    300


<210> 67
<211> 365
<212> PRT
<213> Homo sapiens

<400> 67
Arg Arg Pro Pro Ser Ala Thr Pro Ser Gln Trp Pro Phe Val Asn Ser
  1                  5                     10                     15

Ser Phe Lys Ala Gly Ala Ala Leu Glu Ile Gly Ala Gly Thr Asn Ile
                 20                     25                     30

Pro Val Leu Gly Val Gln Glu Glu Asp Gly Ser Asn Arg Ser Ser Ser
             35                     40                     45

Leu Gln Val Ile Ile Asp Val Asp Gly Ile Gln Leu Ala Arg Asp Ile
     50                     55                     60

Pro Met Ser Ser Ser His Pro Val Ser Pro Asn Pro His His Gly Gly
```

```
         65                    70                    75                    80
Ala Ala Glu Ile Lys Lys Pro Asn Ile Ser Gly Phe Thr Asp Ile Ser
                85                    90                    95

Pro Glu Glu Leu Arg Leu Glu Tyr His Asn Phe Leu Thr Ser Asn Asn
               100                   105                   110

Leu Gln Ser Tyr Leu Asn Ser Val Gln Arg Leu Ile Asn Gln Trp Arg
               115                   120                   125

Asn Arg Val Asn Glu Leu Lys Ser Leu Asn Ile Ser Thr Lys Val Ala
          130                   135                   140

Leu Leu Ser Asp Val Lys Asp Gly Val Asn Pro Ala Ala Pro Ala Phe
145                   150                   155                   160

Gly Phe Gly Ser Ser Gln Ala Ala Thr Phe Met Ser Pro Gly Phe Pro
               165                   170                   175

Val Asn Asn Ser Ser Ser Asp Asn Ala Gln Asn Phe Ser Phe Lys Thr
               180                   185                   190

Asn Ser Gly Phe Ala Ala Ala Ser Ser Gly Ser Pro Ala Gly Phe Gly
          195                   200                   205

Ser Ser Pro Ala Phe Gly Ala Ala Ala Ser Thr Ser Ser Gly Ile Ser
          210                   215                   220

Thr Ser Ala Pro Ala Phe Gly Phe Gly Lys Pro Glu Val Thr Ser Ala
225                   230                   235                   240

Ala Ser Phe Ser Phe Lys Ser Pro Ala Ala Ser Ser Phe Gly Ser Pro
                    245                   250                   255

Gly Phe Ser Gly Leu Pro Ala Ser Leu Ala Thr Gly Pro Val Arg Ala
          260                   265                   270

Pro Val Ala Pro Ala Phe Gly Gly Gly Ser Ser Val Ala Gly Phe Gly
          275                   280                   285

Ser Pro Gly Ser His Ser His Thr Ala Phe Ser Lys Pro Ser Ser Asp
          290                   295                   300

Thr Phe Gly Asn Ser Ser Ile Ser Thr Ser Leu Ser Ala Ser Ser Ser
305                   310                   315                   320

Ile Ile Ala Thr Asp Asn Val Leu Phe Thr Pro Arg Asn Lys Leu Thr
                    325                   330                   335

Val Glu Glu Leu Glu Gln Phe Gln Ser Lys Lys Phe Thr Leu Gly Lys
               340                   345                   350

Ile Pro Leu Lys Pro Pro Pro Leu Glu Leu Leu Asn Val
          355                   360                   365
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<210> 68

<211> 6
<212> PRT
<213> Homo sapiens
<400> 68

Cys Lys Pro Cys Leu Lys
 1   5

<210> 69
<211> 11
<212> PRT
<213> Homo sapiens

<400> 69

Cys Leu Lys Met Lys Asp Gln Cys Glu Lys Cys
 1   5   10

<210> 70
<211> 87
<212> PRT
<213> Homo sapiens

<400> 70
Lys Thr Pro Ser Val Ser Asp Ala Val Ala Met Ala Ile Cys Gln Phe
 1   5   10   15

Phe Leu Gln Gly Arg Cys Arg Phe Gly Asp Arg Cys Trp Asn Glu His
            20   25   30

Pro Gly Ala Arg Gly Ala Gly Gly Gly Arg Gln Gln Pro Gln Gln Gln
            35   40   45

Pro Ser Gly Asn Asn Arg Arg Gly Trp Asn Thr Thr Ser Gln Arg Tyr
        50   55   60

Ser Asn Val Ile Gln Pro Ser Ser Phe Ser Lys Ser Thr Pro Trp Gly
 65   70   75   80

Gly Ser Arg Asp Gln Glu Thr
                85

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              PATENT APPLICATION:  US/09/832,129      TIME: 13:10:53

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  4 <120> TITLE OF INVENTION: 19 Human secreted proteins
  6 <130> FILE REFERENCE: PZ045P1
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  9 <141> CURRENT FILING DATE: 2001-04-11
 11 <150> PRIOR APPLICATION NUMBER: PCT/US00/28664
 12 <151> PRIOR FILING DATE: 2000-10-17
 14 <150> PRIOR APPLICATION NUMBER: 60/163,085
 15 <151> PRIOR FILING DATE: 1999-11-02
 17 <150> PRIOR APPLICATION NUMBER: 60/172,411
 18 <151> PRIOR FILING DATE: 1999-12-17
 20 <160> NUMBER OF SEQ ID NOS: 70
 22 <170> SOFTWARE: PatentIn Ver. 2.0
 25 <210> SEQ ID NO: 1
 26 <211> LENGTH: 733
 27 <212> TYPE: DNA
 28 <213> ORGANISM: Homo sapiens
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 32 aattcgaggg tgcaccgtca gtcttcctct tccccccaaa acccaaggac accctcatga    120
 33 tctcccggac tcctgaggtc acatgcgtgg tggtggacgt aagccacgaa gaccctgagg    180
 34 tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg    240
 35 aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact    300
 36 ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca acccccatcg    360
 37 agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc    420
 38 catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct    480
 39 atcccagcga catcgccgtg gagtggagca gcaatgggca gccggagaac aactacaaga    540
 40 ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg    600
 41 acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc    660
 42 acaaccacta cacgcagaag agcctctccc tgtctccggg taaatgagtg cgacggccgc    720
 43 gactctagag gat                                                       733
 46 <210> SEQ ID NO: 2
 47 <211> LENGTH: 5
 48 <212> TYPE: PRT
 49 <213> ORGANISM: Homo sapiens
 51 <220> FEATURE:
 52 <221> NAME/KEY: Site
 53 <222> LOCATION: (3)
 54 <223> OTHER INFORMATION: Xaa equals any of the twenty naturally ocurring L-amino acids
 56 <400> SEQUENCE: 2
W--> 57 Trp Ser Xaa Trp Ser
 58    1                 5
 60 <210> SEQ ID NO: 3
 61 <211> LENGTH: 86
 62 <212> TYPE: DNA
 63 <213> ORGANISM: Homo sapiens
 65 <400> SEQUENCE: 3
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66 gcgcctcgag atttccccga aatctagatt tccccgaaat gatttccccg aaatgatttc      60
67 cccgaaatat ctgccatctc aattag                                          86
70 <210> SEQ ID NO: 4
71 <211> LENGTH: 27
72 <212> TYPE: DNA
73 <213> ORGANISM: Homo sapiens
75 <400> SEQUENCE: 4
76 gcggcaagct ttttgcaaag cctaggc                                         27
79 <210> SEQ ID NO: 5
80 <211> LENGTH: 271
81 <212> TYPE: DNA
82 <213> ORGANISM: Homo sapiens
84 <400> SEQUENCE: 5
85 ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gatttccccg      60
86 aaatatctgc catctcaatt agtcagcaac catagtcccg cccctaactc cgcccatccc     120
87 gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa tttttttttat   180
88 ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt     240
89 ttttggaggc ctaggctttt gcaaaaagct t                                   271
92 <210> SEQ ID NO: 6
93 <211> LENGTH: 32
94 <212> TYPE: DNA
95 <213> ORGANISM: Homo sapiens
97 <400> SEQUENCE: 6
98 gcgctcgagg gatgacagcg atagaacccc gg                                   32
101 <210> SEQ ID NO: 7
102 <211> LENGTH: 31
103 <212> TYPE: DNA
104 <213> ORGANISM: Homo sapiens
106 <400> SEQUENCE: 7
107 gcgaagcttc gcgactcccc ggatccgcct c                                   31
110 <210> SEQ ID NO: 8
111 <211> LENGTH: 12
112 <212> TYPE: DNA
113 <213> ORGANISM: Homo sapiens
115 <400> SEQUENCE: 8
116 ggggactttc cc                                                        12
119 <210> SEQ ID NO: 9
120 <211> LENGTH: 73
121 <212> TYPE: DNA
122 <213> ORGANISM: Homo sapiens
124 <400> SEQUENCE: 9
125 gcggcctcga ggggactttc ccggggactt tccgggggact ttccgggact ttccatcctg    60
126 ccatccaat tag                                                        73
129 <210> SEQ ID NO: 10
130 <211> LENGTH: 256
131 <212> TYPE: DNA
132 <213> ORGANISM: Homo sapiens
134 <400> SEQUENCE: 10
135 ctcgagggga ctttcccggg gactttccgg ggactttccg ggactttcca tctgccatct     60
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PATENT APPLICATION: US/09/832,129   TIME: 13:10:53

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136 caattagtca gcaaccatag tcccgccct aactccgcc atcccgcccc taactccgcc       120
137 cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga     180
138 ggccgcctcg gcctctgagc tattccgaa gtagtgagga ggcttttttg gaggcctagg      240
139 cttttgcaaa aagctt                                                     256
142 <210> SEQ ID NO: 11
143 <211> LENGTH: 1684
144 <212> TYPE: DNA
145 <213> ORGANISM: Homo sapiens
147 <400> SEQUENCE: 11
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153 accaacttgg aagaagccaa gaagaagaaa gaggatgccc tgaatgacac caaggattca     360
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187 cactgagtct tcattgctgg gtttttagcgg ttgctgctgt ttcggatcag catgccacaa    180
188 gcccttcga ctggctcctc tctgataagg gacccttcca tcgctcacag gaatacacag    240
189 attttgtgga cagaagccgg cagggattta gcacaagata caagatatac agggagtttg    300
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195 cttcttattt cattgacagg gacagcaccc ttcggagact tcaccacatt caaattgcat   660
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202 aattcaagtt atttatgaaa aggctaccta tgaattattt cctcaacaca tctactataa  1080
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216 acctaccccct gcagtgttat aactggacat taactctagg gaacaaatgg aagacatttt  1920
217 ttgagacagt acacatctac ctgagaagtc gcatcaagtc caatggtccc aatggtaatg  1980
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227 gaatatatta tacagcagtt ttggtttatg aatgacataa atactgacac cagtctagaa  2580
228 gacattctac tttttacaat aaatttcatt tgtaattata tatgttccgt ggcaatgctt  2640
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241 gtgctagcgc tgctgggggc cgcccatgaa agcgcagcca tggcggcatc tgcaaacata   180
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              PATENT APPLICATION:  US/09/832,129      TIME: 13:10:53

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291  aaaaaaaaag  ttaaactctt  cttttctttt  tattataatg  accagctttt  ggtatttcat   3180
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___Please Note:___
**Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220> to
<223> fields of each sequence which presents at least one n or Xaa.**

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                    VERIFICATION SUMMARY                DATE: 04/27/2001
                    PATENT APPLICATION:  US/09/832,129  TIME: 13:10:54

                    Input Set : A:\PZ045P1_SeqList04112001.txt
                    Output Set: N:\CRF3\04272001\I832129.raw

L:8 M:270 C: Current Application Number differs, Replaced Current Application Number
L:57 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:845 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:2556 M:283 W: Missing Blank Line separator, <400> field identifier
L:2566 M:283 W: Missing Blank Line separator, <400> field identifier
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